

## Ennis, David, EMNRD

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**From:** Hoines, Susan M., OSE  
**Sent:** Thursday, February 05, 2015 3:03 PM  
**To:** Ennis, David, EMNRD  
**Cc:** Johnson, Mike S., OSE; Valentine, Lloyd, OSE; richardbillingsley9@gmail.com  
**Subject:** NM OSE comments RE: modification 14-1 to the minimal impact mining operation permit no. GR065MN held by JC Imperial, LLC.

D.J.,

On February 3, 2015, NMOSE Hydrology received MMD's request for agency comments on a modification, 14-1, to the minimal impact mining operation permit no. GR065MN held by JC Imperial, LLC. NMOSE Hydrology has reviewed the application materials (located at [http://www.emnrd.state.nm.us/MMD/MARP/documents/2014-12-31\\_Mod14-1ApplicationRequest\\_JimCrow\\_GR065MN.pdf](http://www.emnrd.state.nm.us/MMD/MARP/documents/2014-12-31_Mod14-1ApplicationRequest_JimCrow_GR065MN.pdf)). NMOSE staff did not participate in any field inspection of the area of the proposed permit application.

The applicant is proposing to modify his permit no. GR065MN. According to the application, the applicant proposes to replace his existing tank with a new pond to be constructed 1500 ft. SSW of the existing tank.

On the face of the application, it appears that the proposed pond is too small to require a Permit to Construct and Operate a Dam from the NMOSE Dam Safety Bureau.

According to NMOSE District 3 Water Rights Division staff, operations under minimal impact mining operation permit no. GR065MN are covered under existing water rights at the property identified in permit no. GR065MN.

Therefore the Hydrology Bureau does not identify any issues or concerns associated with this request.

Susan Hoines, CGWP, P.E.  
Hydrology Bureau  
NMOSE  
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**Ennis, David, EMNRD**

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**From:** Roth, Daniela, EMNRD  
**Sent:** Monday, February 23, 2015 3:15 PM  
**To:** Ennis, David, EMNRD  
**Subject:** RE: Modification 14-1 Application, Jim Crow Mine, Grant County (GR065MN)

Dear David Ennis:

Thank you for giving me the opportunity to review and comment on the Modification 14-1 Application, Jim Crow Mine, JC Imperial, LLC, in Grant County, NM (GR065MN). I do not anticipate any significant impacts to state listed endangered plants from the proposed modifications..

Please let me know if I can be of further help.

**Daniela Roth**

**BOTANY PROGRAM COORDINATOR**

EMNRD-Forestry Division  
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RYAN FLYNN  
Cabinet Secretary

BUTCH TONGATE  
Deputy Secretary

**MEMORANDUM**

DATE: February 23, 2015

TO: Holland Shepherd, Program Manager, Mining Act Reclamation Program

FROM: Keith Ehlert, Mining Environmental Compliance Section, Ground Water Quality Bureau *KE*

RE: **NMED Response to Request for Comments, Application for Modification 14-1, Permit No. GR065MN, Jim Crow Mine, Grant County, New Mexico**

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On February 3, 2015 the New Mexico Environment Department (NMED) received from the Mining and Minerals Division (MMD), Mining Act Reclamation Program (MARP), a request for agency comments regarding the Jim Crow Mine application (Application) to modify Permit No. GR065MN. The Application was submitted by JC Imperial, LLC.

NMED cannot provide comments on the Application at this time. On March 10, 2014, NMED issued a conditional determination for the Jim Crow Mine Minimal Impact New Mining Operation, Permit No. GR065MN. The following is a summary of the conditions included in the determination.

- Any rock material from the Jim Crow Mine stockpiled on the site for more than one month shall be tested for acid mine drainage (AMD) potential using the modified Sobek method of acid base accounting (ABA) and net acid generating potential (NAG). The testing shall be performed on each estimated 100 yards of material removed from the mine.
- Within 6 months of approval of the MMD permit, a minimum of five samples of waste rock presently stockpiled within the Permit Area shall be collected and tested using the methods stated above.
- Water pumped from the Jim Crow Mine during mine dewatering shall be collected and tested semi-annually for constituents listed in the determination.

The MMD permit was issued on May 13, 2014 and it is NMED's understanding that mining activities have been on-going since the MMD permit was issued. To date, NMED has not received any information indicating that the conditions of the determination have been met. NMED cannot comment on the Application to modify Permit No. GR065MN until the conditions of the determination are met, or information indicating the conditions of the determination have been met is provided. This issue needs to be resolved as quickly as possible, and as stated in determination, NMED reserves the right to withdraw the determination.

xc: Kurt Vollbrecht, Program Manager NMED MECS  
Jerry Schoeppner, Chief, GWQB  
James Hogan, Chief, SWQB  
Richard Goodyear, Chief, AQB  
Fernando Martinez, Director, EMNRD-MMD  
David Ennis, EMNRD-MMD  
George Llewellyn, NMED MECS



STATE OF NEW MEXICO  
 DEPARTMENT OF CULTURAL AFFAIRS  
 HISTORIC PRESERVATION DIVISION

*Jim Crow Mine  
 GR065MN  
 mod 14-1*

Susana Martinez  
 Governor

BATAAN MEMORIAL BUILDING  
 407 GALISTEO STREET, SUITE 236  
 SANTA FE, NEW MEXICO 87501  
 PHONE (505) 827-6320 FAX (505) 827-6338



February 27, 2015

David J. Ennis, P.G.  
 Permit Lead  
 Mining Act Reclamation Program  
 Mining and Minerals Division  
 1220 South St. Francis Drive  
 Santa Fe, NM 87505

Re: Modification 14-1, Jim Crow Mine, J.C. Imperial, Grant County, New Mexico, Permit No. GR065MN

Dear Mr. Ennis:

This letter is in response to the above referenced permit modification, received at the Historic Preservation Division (HPD) on February 5, 2015. I apologize for the delay in providing my response.

According to our records, there are no properties listed on the National Register of Historic Places or the State Register of Cultural Properties. In addition, a review of our archaeological records shows that a cultural resources survey has not been conducted in this area. Although an archaeological survey has not been conducted, this area has been mined since the late 1800's and there are historic mines in the area. In the absence of an archaeological survey, this office recommends that historic artifact scatters and any historic infrastructure be avoided by the current proposed mining activities.

If you have any questions regarding these comments, please do not hesitate to contact me. I can be reached by telephone at (505) 827-4064 or by email at [michelle.ensey@state.nm.us](mailto:michelle.ensey@state.nm.us).

Sincerely,

Michelle M. Ensey  
 Archaeologist

Log: 100793



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RYAN FLYNN  
Secretary  
BUTCH TONGATE  
Deputy Secretary

MEMORANDUM

DATE: May 5, 2015

TO: Holland Shepherd, Program Manager, Mining Act Reclamation Program

FROM: John Hall, Mining Act Team Leader, Ground Water Quality Bureau  
John Moeny, Surface Water Quality Bureau  
Neal Butt, Air Quality Bureau

RE: **NMED Comments, JC Imperial, LLC, Jim Crow Mine Haul Road Relocation and Reclamation and Relocation of Impoundment, MMD Permit GR065MN, Modification 14-1**

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The New Mexico Environment Department (NMED) received correspondence from the Mining and Minerals Division (MMD) on February 3, 2015 requesting NMED review and provide comments on the above referenced MMD permitting action.

The modification describes the relocation of part of the haul road to a location that has a shallower grade. The abandoned portion of the haul road will be reclaimed with waste rock that is described in the modification as containing no more sulfides than the surface material. Further, the reclaimed portion of the haul road will be ripped, disked, barricaded, and seeded. Additionally, the modification describes the relocation of the earthen impoundment to a location farther from the mine to prevent infiltration of discharged mine water back into the mine. The new impoundment will be sized and constructed in a manner similar to the existing one.

MMD requested comments within 20 days of receipt in accordance with Section 19.10.3.304.H NMAC. However, NMED did not provide comments because information required by conditions contained in its March 10, 2014 Determination had not been provided. As that information has now been provided, NMED is providing the following comments:

**Air Quality Bureau**

The Air Quality Bureau comments are attached under separate letterhead.

**Surface Water Quality Bureau**

The design of the road must allow for unimpeded drainage of surface water at all channel crossings by installing culverts or similar. Storm water on the road surface must be managed and discharged at multiple points to prevent the concentration of large amounts of storm water and potential to create erosion of either the road prism or adjacent landform. Drainage into swales or depressions is recommended to allow storm water to infiltrate and prevent overland flow and erosion.

**Ground Water Quality Bureau**

Based on the mine-water and waste-rock analyses provided, NMED finds the proposed mining activities as described in Modification 14-1 are likely to have minimal environmental impact if operated, constructed, and reclaimed as described in Modification 14-1 and in accordance with the approved permit (GR065MN) and the conditions contained in NMED's March 10, 2014 Determination (attached).

NMED believes that any waste rock, development waste, or other gangue rock used for construction of the new portion of the haul road or reclamation of the abandoned portion of the existing haul road must be analyzed every 100 cubic yards as described in Condition E of permit GR065MN to determine if it is acid generating. The existing waste rock stockpiles that have already been sampled and analyzed as required by Condition F of permit GR065MN may be used without further sampling and analyses.

If you have any questions, please contact John Hall at (505) 827-1049.

cc: Phyllis Bustamante, Acting Bureau Chief, GWQB  
James Hogan, Bureau Chief, SWQB  
Richard Goodyear, Bureau Chief, AQB  
Fernando Martinez, Division Director, EMNRD-MMD  
David J. Ennis, Lead Staff, EMNRD-MMD  
Kurt Vollbrecht, Program Manager, MECS



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***Air Quality Bureau***

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**Ryan Flynn**  
Cabinet Secretary

**Butch Tongate**  
Deputy Secretary

**MEMORANDUM**

DATE: February 11, 2015

TO: Kurt Vollbrecht  
Program Manager  
Mining Environmental Compliance Section  
Ground Water Quality Bureau

FROM: Neal Butt  
Environmental Scientist & Specialist, Air Quality Bureau

RE: Request for Comments: Modification 14-1 Application, Jim Crow Mine, JC Imperial, LLC,  
Grant County, New Mexico  
Permit Tracking No. GR065MN

The New Mexico Air Quality Bureau (AQB) has completed its review of the above mentioned mining project. Pursuant to the New Mexico Mining Act Rules, the AQB has the following comments:

***Air Quality Permitting History***

The AQB has not issued any air quality permits for this operation.

**Details**

The applicant has submitted an application for a Modification (14-1) of their Minimal Impact Existing Mining Operation Permit (GR065MN) to include construction of a new haul road, reclamation of a portion of the existing road, and relocation of a pond to contain and percolate water obtained from the Jim Crow Mining operation in Grant County, New Mexico, Section 23, T17S, R21W.



### Air Quality Requirements

The New Mexico Mining Act of 1993 states that “Nothing in the New Mexico Mining Act shall supersede current or future requirements and standards of any other applicable federal or state law.” Thus, the applicant is expected to comply with all requirements of federal and state laws pertaining to air quality. Current requirements which may be applicable in this mining project include, but are not limited to the following:

Subsection A of 20.2.72.200 NMAC, *Application For Construction, Modification, NSPS, And NESHAP - Permits And Revisions*, states that: “Permits must be obtained from the Department by:

(1) “any person constructing a stationary source which has a potential emission rate greater than 10 pounds per hour or 25 tons per year of any regulated air contaminant for which there is a National or New Mexico Ambient Air Quality Standard {e.g. PM, TSP}. If the specified threshold in this subsection is exceeded for any one regulated air contaminant, all regulated air contaminants with National or New Mexico Ambient Air Quality Standards emitted are subject to permit review[. . .]”; and

(3) “Any person constructing or modifying any source or installing any equipment which is subject to 20.2.77 NMAC, *New Source Performance Standards* {e.g. *Subpart OOO—Standards of Performance for Nonmetallic Mineral Processing Plants*}, 20.2.78 NMAC, *Emission Standards for Hazardous Air Pollutants*, or any other New Mexico Air Quality Control Regulation which contains emission limitations for any regulated air contaminant;”

Also, Paragraph (1) of Subsection A of 20.2.73.200 NMAC, *Notice Of Intent* states that:

“Any owner or operator intending to construct a new stationary source which has a potential emission rate greater than 10 tons per year of any regulated air contaminant or 1 ton per year of lead shall file a Notice Of Intent with the department.”

In addition, pursuant to Subsection A of 19.10.3.303 NMAC, *Minimal Impact Existing Mining Operations*:

“An existing mining operation that continues mining operations will not be considered a minimal impact existing mining operation if it exceeds 10 acres of disturbed land, except that an existing mining operation extracting humate may exceed 10 acres but not 20 acres if its approved closeout plan or reclamation plan provides for concurrent reclamation of mined-out areas. Permanent roads and areas within the permit area that are reclaimed will not be counted as part of the acreage limitation for a minimal impact existing mining operation. Reclaimed, for this purpose, means all financial assurance has been released, except the amount held to re-establish vegetation pursuant to Subsection A of 19.10.12.1204 NMAC. Construction of roads and access ways, the types of disturbances, and the applicant's previous history of compliance with the act and 19.10 NMAC will be major factors in the director's determination of minimal impact status.”

**Permitting Requirements for Regulated Equipment and Sources of Fugitive Dust (e.g. PM , TSP)**

The Air Quality Bureau regulates particulate matter emissions from stationary sources that process mined materials via: 20.2.15 NMAC, *Pumice, Mica, and Perlite Processing*; 20.2.19 NMAC, *Potash, Salt or Sodium Sulfate Processing Equipment – PM*; 20.2.42 NMAC, *Coal Mining and Preparation Plants – PM*; and 20.2.72 NMAC, *Construction Permits*. The emissions from equipment and activities such as crushers, screens, conveyors, baghouses, material drop and transfer points, haul roads, and storage piles must all be considered in determining applicability under 20.2.72 NMAC. Please contact the Permit Section for additional guidance.

Fugitive dust is a common problem at mining sites. Fugitive dust emissions are regulated generally by 20.2.72.200.A NMAC (e.g. 10 lb./hour or 25 TPY). However, specific strategies to control fugitive dust are left up to the discretion of the owner /operator of the source. The following control strategies can be included in a comprehensive facility dust control plan (from EPA’s *Compilation of Air Pollutant Emission Factors, AP-42*):

Unpaved haul roads and traffic areas: paving of permanent and semi-permanent roads, application of surfactant, watering, and traffic controls, such as speed limits and traffic volume restrictions.

Paved roads: covering of loads in trucks to eliminate truck spillage, paving of access areas to sites, vacuum sweeping, water flushing, and broom sweeping and flushing.

Material handling: wind speed reduction and wet suppression, including watering and application of surfactants (wet suppression should not confound track out problems).

Bulldozing: wet suppression of materials to “optimum moisture” for compaction.

Scraping: wet suppression of scraper travel routes.

Storage piles: enclosure or covering of piles, application of surfactants.

Miscellaneous fugitive dust sources: watering, application of surfactants or reduction of surface wind speed with windbreaks or source enclosures.

The above is not intended to be an exhaustive list of all requirements that could apply. The applicant should be aware that this determination does not supersede the requirements of any current federal or state air quality requirement. The Air Quality Bureau or the US Environmental Protection Agency may implement additional requirements, regulations and standards for the control of fugitive dust sources in the future. This written determination does not preclude the applicability of any forthcoming state or federal regulations.

If you have any questions, please contact me at (505) 476-4317.

State of New Mexico  
Energy, Minerals and Natural Resources Department

Susana Martinez  
Governor

David Martin  
Cabinet Secretary

Brett F. Woods, Ph.D.  
Deputy Cabinet Secretary

Fernando Martinez, Director  
Mining and Minerals Division



February 3, 2015

Mr. John Hall  
NMED Ground Water Quality Bureau  
P.O. Box 5469  
Santa Fe, NM 87502-5469

**Re: Request for Agency Comments on Modification 14-1 Application, Jim Crow Mine, JC Imperial, LLC, Grant County, New Mexico, Permit No. GR065MN**

Dear Mr. Hall,

On January 28, 2015, the Mining and Minerals Division ("MMD") received a permit application from JC Imperial, LLC to modify permit number GR065MN to include construction of a new haul road, reclamation of a portion of the existing road, and relocation of a pond to contain and percolate water obtained from the Jim Crow Mining operation. The Jim Crow Mine is located in Section 23, T17S, R21W in Grant County, New Mexico. Pursuant to §19.10.3.304.H NMAC, MMD is requesting comments from your agency regarding the application, which is being processed by MMD as Modification 14-1 to Permit No. GR065MN. The application received from the operator can be downloaded from MMD's website at <http://www.emnrd.state.nm.us/MMD/MARP/GR065MNMod14-1.html>.

In accordance with §19.10.3.304.H NMAC, your agency has 20 days from the date of receipt of this letter in which to provide comments. The Director will consider these comments in making the determination of eligibility for minimal impact status. An archaeological survey of the proposed mining operation site has not been conducted since the proposed mining operation is on private patented claims held by the operator.

If you have any questions, please contact me at (505) 476-3434 or by email at [david.ennis@state.nm.us](mailto:david.ennis@state.nm.us).

Sincerely,

A handwritten signature in black ink, appearing to read "DJ Ennis".

David J. (DJ) Ennis, P.G., Permit Lead  
Mining Act Reclamation Program (MARP)

cc: Mine File (GR065MN)



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*Office of the Secretary*

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Cabinet Secretary

BUTCH TONGATE  
Deputy Secretary

CONDITIONAL DETERMINATION PURSUANT TO  
THE NEW MEXICO MINING ACT,  
NMSA 1978, §69-36-7(P)(2), AND  
NEW MEXICO MINING ACT RULE 304.J.6  
FOR A MINIMAL IMPACT NEW MINING OPERATION

Determination is hereby provided that J.C. Imperial LLC, the applicant for the Jim Crow Mine Minimal Impact New Mining Operation, Permit No. GR065MN, submitted pursuant to the New Mexico Mining Act NMSA, §69-36-1 through 20 (Repl. Pamp. 1997) (NMMA), has demonstrated that the activities to be permitted or authorized will be expected to achieve compliance with all applicable air, water quality and other environmental standards if carried out as described in the NMMA and all applicable state and federal air, water quality and other environmental permits.

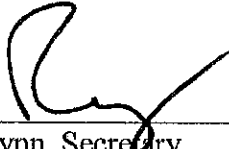
**Conditions of Determination**

- 1) J. C. Imperial LLC shall demonstrate through sampling and analysis as outlined in the attached comment letter that any rock material excavated from the Jim Crow Mine and stockpiled on the site for more than one month will not be acid generating.
- 2) J.C. Imperial LLC shall demonstrate through sampling and analysis as outlined in the attached comment letter that water pumped from the Jim Crow Mine during mine dewatering does not exceed State of New Mexico Water Quality Control Commission (WQCC) standards for the designated constituents.

In the event J.C. Imperial LLC fails to demonstrate that rock material excavated from the Jim Crow Mine is not acid generating, or that water pumped from the Jim Crow Mine meets WQCC standards, NMED reserves the right to withdraw this conditional determination.

Applicant: J.C. Imperial LLC  
Operation: Jim Crow Mine  
Permit: GR065MN

Determination by:

  
\_\_\_\_\_  
Ryan Flynn, Secretary  
New Mexico Environment Department

Date: March 10, 2014



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ENVIRONMENT DEPARTMENT



*Ground Water Quality Bureau*

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RYAN FLYNN  
Cabinet Secretary

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Deputy Secretary

**MEMORANDUM**

DATE: March 10, 2014

TO: Holland Shepherd, Program Manager, Mining Act Reclamation Program

FROM: George Llewellyn, Ground Water Quality Bureau  
John Moeny, Surface Water Quality Bureau

THROUGH: Keith Ehlert, NMED Acting Mining Act Team Leader

RE: **Request for Re-Evaluation and Comments on Additional Information, New Minimal Impact Mining Operation Permit Application, Jim Crow Mine, Grant County, New Mexico, Permit No. GR065MN**

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On February 20, 2014, the New Mexico Environment Department (NMED) received from the Mining Act Reclamation Program (MARF) a request for re-evaluation and comments on additional information pertaining to the minimal impact new mining operation application (Application) dated November 1, 2012 for the Jim Crow Mine. NMED has reviewed the additional information pursuant to 19.10.3.304.H NMAC and is submitting comments within the required 20 day review period.

The additional information has been reviewed by the Air Quality Bureau, the Surface Water Quality Bureau, and the Ground Water Quality Bureau pursuant to Subpart 302.G of the New Mexico Mining Act (NMMA) Rules. Comments in this memorandum have been submitted jointly by the Surface Water Quality Bureau and Ground Water Quality Bureau.

The proposed Jim Crow minimal impact mine is located approximately 10 miles northeast of Duncan, Arizona in Section 14, T17S, R21W, Grant County, New Mexico. The proposed new mine is planned as an underground gold/silver operation and the estimated total disturbance, including excavations, stockpiles and roads is estimated at less than two acres.

## **Background**

In a memorandum dated January 11, 2013, NMED provided comments to MARP expressing concerns regarding the discharge of mine water to a bentonite lined pond prior to discharge to Carlisle Creek. NMED required complete characterization of the mine water and filing of a Notice of Intent with the Ground Water Quality Bureau. Because of uncertainties in the Application regarding the potential for water quality impacts from mine dewatering discharges, NMED could not provide a determination at that time. NMED was provided with a laboratory analysis of a water sample collected on January 23, 2013 from the Jim Crow Mine. On March 8, 2013, NMED received a Notice of Intent (NOI) to discharge mine water from the Jim Crow Mine. An amendment to the NOI dated April 9, 2013 indicated that mine water would be discharged to an unlined pond and allowed to percolate back into the ground. In a letter to Mr. Joy Merz dated May 14, 2013, NMED indicated that based on information provided in the NOI, the subsequent amendment to the NOI, and laboratory analysis of the mine water, a Discharge Permit would not be required as long as the discharge is as described. On February 20, 2014, MARP forwarded additional information to NMED pertaining to the Application, which includes additional reclamation plan details and mine operation details.

## **Conclusions and Conditions**

Based on the information provided, NMED can now provide a conditional determination at this time. The determination will remain valid provided the operator complies with the following conditions:

1. Item 3f of the additional information indicates that ore piles, low grade ore stockpiles, and waste rock piles may be left on the surface during mining, and if allowed by NMED will be placed in the shaft, or will be graded into the site, during reclamation. NMED requires that any rock material from the Jim Crow Mine stockpiled on the site for more than one month be tested for acid mine drainage (AMD) potential using the modified Sobek method of acid base accounting (ABA) and net acid generating (NAG) testing. The testing shall be performed on each estimated 100 yards of material removed from the mine. Additionally, within 6 months of approval of the MMD permit, a minimum of five samples of waste rock presently stockpiled within the Permit Area shall be collected and similarly tested. All samples shall be submitted to a certified laboratory for the testing. The agencies shall be notified a minimum of two weeks before the samples are collected to allow the agencies the option of being present during the collection process.

Water pumped from the Jim Crow Mine during mine dewatering shall be collected and tested semi-annually, for the following constituents: total dissolved solids (TDS), sulfate, aluminum, arsenic, cadmium, molybdenum, selenium, silver, cobalt, chromium, copper, iron, fluoride, lead, manganese, nickel, pH, alkalinity carbonate, alkalinity bicarbonate, and zinc. NMED shall be notified a minimum of two weeks before the water samples are collected to allow NMED the option of being present during the sample collection process. Results of the water analyses shall be submitted to the agencies on before the last day of April and October, and must include analyses sheets signed by the laboratory.

Holland Shepherd, Permit GR065MN

March 10, 2014

Page 3 of 3

NMED finds the proposed mining activities as described are likely to have minimal environmental impact if operated and reclaimed in accordance with the approved permit and requirements listed above.

NMED will perform periodic inspections of the Jim Crow Mine to determine if rock samples have undergone any observable changes that might indicate acid generation. Changes in the character of the waste rock or mine water produced may require submittal of a discharge permit application and a change in operational procedures to insure protection of water quality. Additionally, NMED recommends that the operator notify MMD immediately if any seeps are observed emanating from the rock piles.

cc: Jerry Schoeppner, Chief, GWQB  
James Hogan, Chief, SWQB  
David Ennis, EMNRD-MMD  
Kurt Vollbrecht, Acting Program Manager, MECS